Bear Creek Valley Groundwater ROD

Scope: The Bear Creek Valley (BCV) Groundwater Record of Decision (ROD) project will select a final remedy for groundwater in the BCV Watershed, which extends from the western edge of the Y-12 National Security Complex (Y-12) to TN Highway 95. The remedy will be selected and implemented under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process. The project will:

- Prepare a remedial investigation (RI)/focused feasibility study (FS), Proposed Plan and ROD for regulatory approval, including evaluation of public comments; and
- Prepare a plan for future monitoring and institutional controls of the area.

The BCV Groundwater ROD project is planned for implementation by the Integrated Facility Disposition Program (IFDP) at an estimated cost of approximately $5M, which is based on an assumed remedy of monitored natural attenuation.

Environmental Risk and Principal Threat Source Material Rating: **Medium**

- BCV contains three former waste disposal areas located immediately west of Y-12 which are primary contaminant source areas: the Boneyard/Burnyard (BYBY), S-3 Site, and Bear Creek Burial Grounds (BCBG). Shallow groundwater is the principal pathway for release of most contaminants which are discharged into tributaries to Bear Creek. The main contaminant of concern is uranium.
- The BCV Phase I ROD[1] establishes a key goal of reducing uranium concentrations in surface water at the watershed integration point (located at the planned future boundary of the restricted industrial area). BYBY remediation has been successfully completed to reduce uranium flux from the area as required by the BCV Phase I ROD. Remediation of S-3 Site Pathway 3 is planned for implementation by IFDP as part of a separate project to complete BCV Phase I ROD actions.

Other Prioritization Factors:

- DOE has access restrictions in place in all BCV zones. BCV Phase I ROD and BCBG remedial actions are expected to further reduce contaminant migration from source areas so that clean groundwater and surface water in the westernmost portions of BCV continue to be acceptable for unrestricted use. While the potential future land use in some BCV zones includes unrestricted and recreational scenarios, DOE has no current plans for release of land within BCV.
- Several of the BCBG disposal units have been closed and capped under the Resource Conservation and Recovery Act (RCRA). Leachate from the BCBG is being actively collected and treated at Y-12 facilities. In order to further reduce migration of contaminants, a CERCLA remedy for the BCBG will be selected and implemented as part of the separate BCBG ROD and remediation project planned by IFDP. Hydrologic isolation is the anticipated selected remedy.
- The BCV Groundwater ROD is scheduled for IFDP implementation after completion of the BCV Phase I ROD and BCBG remedial actions. Data in the planned future RI will be used to prepare the BCV Groundwater ROD, which is anticipated to require institutional controls and monitoring.

Overall Prioritization: **Low**

The overall prioritization for the BCV Groundwater ROD project is **Low**.

The information presented in this fact sheet is preliminary and will be refined during Critical Decision-2/3 development.

[1] *Record of Decision for Phase I Activities in Bear Creek Valley at the Oak Ridge Y-12 Plant, Oak Ridge, Tennessee (DOE/OR/01-1750&D4, DOE 2000*

For more information, please contact the DOE public affairs office at (865) 576-0885.